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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,896	10/08/2003	Toshihiko Ishigami	2562/71228/JPW/PJP/FHB	6288

7590

09/19/2005

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EXAMINER

WALFORD, NATALIE K

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/680,896

Applicant(s)

ISHIGAMI ET AL.

Examiner

Natalie K. Walford

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/8/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement filed October 8, 2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because there is no English abstract or statement of relevance pertaining to the foreign patent documents. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2879

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishigami et al. (US 6,353,289).

Regarding claim 1, Ishigami discloses a metal vapor discharge lamp (FIG. 6, 5) including: refractory and light-transmitting hermetic vessel (FIG. 6, 1); a pair of electrodes (FIG. 6, 2) fixed to the hermetic vessel; a discharge medium containing a halide, a rare gas and substantially disusing mercury (column 7, lines 40-43); and most of light irradiated from the metal vapor discharge lamp having near-infrared wavelengths (750-1100 nm) (FIG. 6, 6c).

Regarding claim 2, Ishigami discloses the metal vapor discharge lamp according to claim 1, wherein the halide contains a halide of at least one of potassium (K), cesium (Cs), and rubidium (Rb) (column 11, lines 44-47), which radiate light of near-infrared wavelengths (750-1100 nm).

Regarding claim 3, Ishigam discloses the metal vapor discharge lamp according to claim 1, further including a visible-light blocking filter (FIG. 4, 7).

Regarding claim 4, Ishigam discloses the metal vapor discharge lamp according to claim 1, wherein a wattage rating of the metal vapor discharge lamp is 100 W or less (column 14, lines 36-26).

Regarding claim 5, Ishigam discloses the metal vapor discharge lamp according to claim 1, wherein a distance between the pair of electrodes falls within a range of 1 mm to 6 mm (column 7, lines 13-22).

Regarding claim 6, Ishigam discloses a metal vapor discharge lamp (FIG. 6, 5) including: a refractory and light-transmitting hermetic vessel (FIG. 6, 1); a pair of electrodes (FIG. 6, 2) fixed to the hermetic vessel; a discharge medium containing first halide and a rare gas (column 7, lines 40-43), the first halide containing a halide of at least one of sodium (Na), scandium (Sc), and a rare earth metal which radiate visible light (380-780 nm) (column 11, lines 18-31); and a ratio of visible-radiation power (380-780 nm) to near-infrared radiation power (750-1100 nm) falling within a range of 0.5 : 1 to 4 : 1, the visible-radiation power and the near-infrared radiation power being output when the metal vapor discharge lamp is in an ON state.

Regarding claim 7, Ishigam discloses the metal vapor discharge lamp according to claim 6, wherein the discharge medium includes: a second halide which generates a relatively high vapor pressure and being a halide of at least one metal which emits a visible light less than that emitted by the metal of the first halide (column 6, lines 29-41); a third halide containing a halide of at least one metal which radiates near-infrared light; and the discharge medium substantially disusing mercury (column 9, lines 5-9).

Regarding claim 8, Ishigam discloses the metal vapor discharge lamp according to claim 6, wherein the discharge medium contains a halide of at least one of potassium (K), cesium (Cs), and rubidium (Rb) (column 11, lines 44-47), which radiate light of near-infrared wavelengths (750-1100 nm).

Regarding claim 9, Ishigam discloses the metal vapor discharge lamp according to claim 6, further including a visible-light blocking filter (FIG. 4, 7).

Regarding claim 10, Ishigam discloses the metal vapor discharge lamp according to claim 6, wherein a wattage rating of the metal vapor discharge lamp is 100 W or less (column 14, lines 36-26).

Regarding claim 11, Ishigam discloses the metal vapor discharge lamp according to claim 6, wherein a distance between the pair of electrodes falls within a range of 1 mm to 6 mm (column 7, lines 13-22).

Regarding claim 12, Ishigam discloses the metal vapor discharge lamp according to claim 6, wherein the rare gas is Xe, Xe of five atoms or more being sealed in the hermetic vessel (column 41, line 1).

Regarding claim 13, Ishigam discloses a projector (FIG. 12) including: a reflector (FIG. 6, 6); a metal vapor discharge lamp (FIG. 6, 5) as specified in any one of claims 1 to 12, the metal vapor discharge lamp being provided on the reflector; and a light control member covering a front surface of the reflector (FIG. 12, 32).

Regarding claim 14, Ishigam discloses the projector according to claim 13, wherein the projector is installed in a vehicle and used as a headlamp (column 1, lines 13-19).

Regarding claim 15, Ishigam discloses the projector according to claim 13, further comprising visible-light blocking means for blocking visible light and passing near-infrared light there through in a high beam mode (FIG. 27, 86a), and means for removing the visible-light blocking means from a radiation direction of the metal vapor discharge lamp in a low beam mode (FIG. 27, 86b).

Regarding claim 16, Ishigam discloses the projector according to claim 13, further comprising a visible-light blocking filter (FIG. 4, 7) provided on at least one of front and rear surfaces of the light control member.

Regarding claim 17, Ishigam discloses the projector according to claim 16, wherein the projector is installed in a vehicle and used as a headlamp (FIG. 12).

Regarding claim 18, Ishigam discloses the projector according to claim 17, wherein the visible-light blocking filter blocks visible light and passes near-infrared light there through in a high beam mode (FIG. 27, 86a), and further comprising means for removing the visible-light blocking filter from a radiation direction of the metal vapor discharge lamp in a low beam mode (FIG. 27, 86b).

Regarding claim 19, Ishigam discloses a metal vapor discharge lamp lighting device (FIG. 6, 5) including: a metal vapor discharge lamp as specified in any of claims 1 to 12; and a lighting circuit which supplies a current three times or more a rated lamp current after the metal vapor discharge lamp is lit, and reduces the current with a lapse of time (column 17, lines 65-67 thru column 18, lines 1-7).

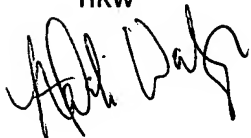
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012. The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

nkW



VIP PATEL
PRIMARY EXAMINER